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FEDERAL COMMUNICATIONS COMMISSION OFFICE OF THE SECRETARY

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of

PR Docket No. 92-235

Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them

To: The Commission

Comments
of the
PUBLIC SAFETY COMMUNICATIONS COUNCIL

These Comments are submitted by the Public Safety Communications Council in response to the Commission's <u>Notice of Proposed Rule Making</u> in PR Docket No. 92-235, which was adopted by the Commission on October 8, 1991, and released on November 6, 1992.

The Public Safety Communications Council ("PSCC" or "the Council") is an organization of associations which the Commission has certified as the representative Frequency Coordinators for the Emergency Medical, Fire, Forestry-Conservation, Highway Maintenance, and Special Emergency Radio Services, as provided in the Commission's Part 90 rules, and of sponsoring entities.

The executive and sponsoring members of the Council include the American Association of State Highway and Transportation Officials (AASHTO); the Forestry-Conservation Communications Association (FCCA); the International Association of Fire Chiefs (IAFC); the International Association of Fish & Wildlife Agencies (IAFWA); the International Municipal Signal Association (IMSA); the National Association of Business and Educational Radio (NABER); and the National Association of State Foresters (NASF).

PSCC BACKGROUND:

The Council was formed in 1958 at the request of the Commission's staff at the time the Commission established the Local Government Radio Service as a "pool", or "overflow" service, for use by parties also eligible in the Fire, Police, Forestry-Conservation and Highway Maintenance Radio Services.

Initially, voluntary coordination of frequencies in the Local Government service was done on a shared and cooperative basis, with all of the organizations representing these services participating

No. of Copies rec'd_ List A B C D E in the process and meeting regularly to resolve any problems which arose. While there have been some changes over the years, including expanding the scope of the Council's interests to cover frequency coordination concerns in all of the Public Safety services and the addition and deletion of Council members, that cooperative effort continues today. Its principal membership has remained constant since 1958 with two exceptions.

Recommendations

Members of the PSCC will be submitting individual comments in this proceeding on a great many issues in Docket 92-235 not discussed in these joint comments by the Council, which relate principally to the concerns of the Public Safety community. The members of PSCC collectively have interests in non-Public Safety issues as well as Public Safety issues. To the extent that a PSCC member organization's separately filed comments are inconsistent with the joint views of the Council on a given issue, the Commission is to regard the individual comments as the position of that member on that issue.

Accordingly, the Council recommends:

- 1. Adoption of the Land Mobile Communications Council's "consensus plan" submitted to the Commission on April 28, 1993. PSCC supports separate migration plans for UHF and VHF channels; the recommendation that movement from 12.5 kHz bandwidth to 6.25 kHz bandwidth be reviewed in a separate proceeding at a later date; LMCC's alternative power limitations proposal; and extending specific authority to frequency coordinators to recommend power limits and relate exclusivity to power and height limits. PSCC supports LMCC's "Option A" for narrow-banding the 150-174 MHz band.
- 2. Retention of the Emergency Medical, Fire, Forestry-Conservation, Highway Maintenance and Police Radio Services as separate services within a Public Safety category of services, with their separate frequency assignments, and with licensees in those services also having equal access to an expanded Public Safety "pool" of frequencies made up of the frequencies currently in the Local Government Radio Service plus those new

¹The original frequency coordinating members were AASHTO, FCCA, IMSA and the Associated Public-Safety Communications Officers (APCO). NABER became a member in 1986 when the Commission divided frequency coordination responsibility for the Special Emergency service between IMSA/IAFC and NABER. APCO withdrew from the Council in 1992.

frequencies which will lie between existing assignments for different services when the current channels are split.²

- 3. Continued interservice frequency sharing between Public Safety services, as currently available, with emphasis on observance of processing time limits. PSCC urges Commission's adoption of Electronic Data Interchange standards to facilitate the transfer of information between coordinators in the coordination process and in the processing of licenses by the Commission.
- 4. Latitude to Public Safety frequency coordinators and in the Commission's rules to permit the use of differing coordination and licensing criteria for different areas of the country by Public Safety frequency coordinators and the Commission based on the unmet spectrum requirements of Public Safety agencies

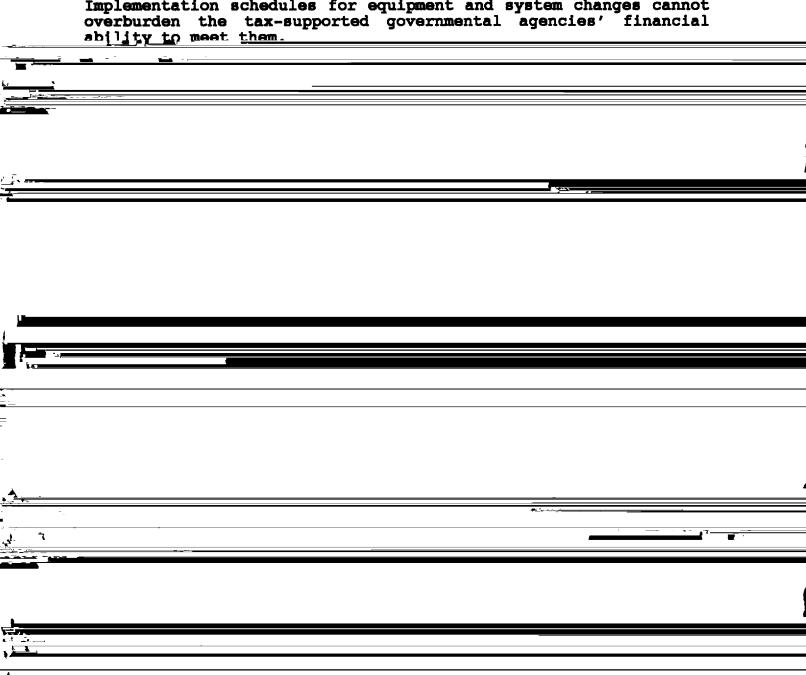
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PSCC GENERAL STATEMENT:

The PSCC supports the Commission's initiative in Docket 92-235 to create more frequency channels for use when and where they are needed to provide essential Public Safety services, but agencies in areas which are not suffering frequency congestion must not be forced to comply with criteria which may be appropriate in heavily populated areas.

Public Safety radio systems must meet minimum jurisdictional and mutual aid communications requirements, whether the systems are designed to serve the geography of regional, State, county, municipal, or more localized civic interests.

Implementation schedules for equipment and system changes cannot



urgency at any time. The types of radio communications systems operated by the various Public Safety disciplines, however, are clearly different one from another.

The PLMR frequencies below 512 MHz under examination by the Commission in this proceeding are those which house the vast majority of the licensees in the public safety services for which the members of PSCC have been certified as Frequency Coordinators.

PSCC has conducted studies of the data bases of Public Safety spectrum users in the United States as maintained by the FCC and others, the results of which are attached to these comments as appendices. Care must be taken in considering the figures to differentiate between "stations", "licensees" or "agencies" and "systems" as those terms are used.

The fact that there are fewer licensees in the services in which State agencies or those with wide-area coverages play a major role should not be misinterpreted as an indication of low radio usage. A tabulation of radio usage in the Forestry-Conservation Service, for instance, show that there are more than 1,155,700 transmitters (base and mobile) covered today in the United States by valid FCC licenses.

The studies show the many variations of spectrum use by the Public Safety agencies in a given state, as well as the great differences between the same types of Public Safety agencies in the different states.

These studies show that as of February 15, 1993 there were some 76,295 entities holding valid licenses for radio systems in the Public Safety services on frequencies below 512 MHz³ in the 50 states, the District of Columbia, Puerto Rico and the US Virgin Islands.

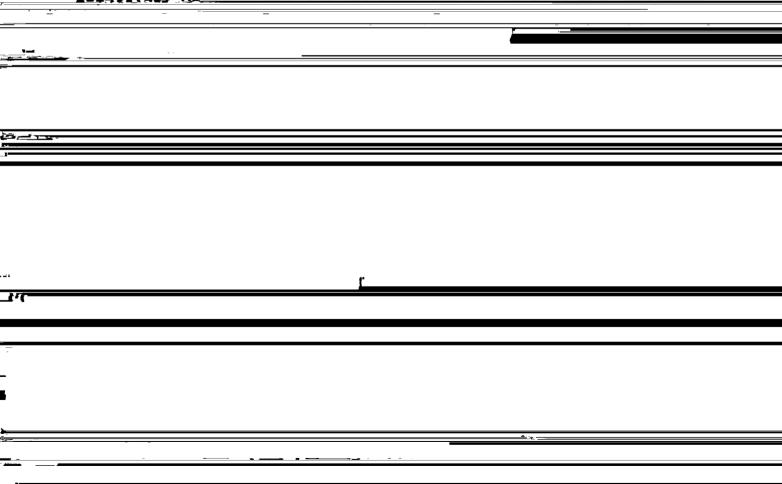
Smergency Radio Service licensee count as one and the same as a count in the new Emergency Medical Radio Service, which came into being as a result of Commission rule changes effective April 2, 1993. This is because of the complexities in separating newly designated Public Safety service licensee numbers out of the Special Emergency Radio Service at this early stage of the new Emergency Medical Radio Service. An early PSCC estimate is that 90% of the frequency coordination volume which had been taking place in the Special Emergency Radio Service prior to April 2, 1993 will become activity in the Emergency Medical Radio Service, while the other 10% will remain a function of the Special Emergency Radio Service, alone.

There were 49,048 (64% of the total) Public Safety entities licensed for frequencies in the 150-174 MHz band; 14,218 (19%) licensed in the 25-50 MHz band; 11,929 (16%) licensed in the 450-470 MHz band; 588 (0.8%) in the 470-512 MHz band; 319 (0.4%) in the 72-76 MHz band; and 153 (0.2%) in the 421-430 MHz band. There were 2,003 Public Safety licensees in the 806-821 MHz band and 164 in the 821-824 MHz band, or just under 3% of the Public Safety total licensed above 800 MHz.

A computer study conducted in June 1992 showed that the numbers of licensees in each of the five Public Safety services using frequencies below 800 megaHertz were: Local Government, 27,688; Fire, 19,604; Police, 19,104; Highway Maintenance, 4,253; and Forestry-Conservation, 1,236. In addition, there were some 22,000 licensees of systems in the Special Emergency Radio Service, including many systems not involved with Emergency Medical operations.

The Commission has not proposed specifically to narrow the bandwidths in the 25-50 MHz "low band", nor do the proposals in Docket 92-235 directly involve uses above 800 MHz.

These bands are discussed here to point to the continued, relatively heavy use of the low band by the Public Safety services



An example of the desirability of such flexibility is apparent in the Fire Radio Service. The Fire Service, largely because of the nature of the funding for Fire department operations and the high percentage of volunteer operations, has been one of the slower services to move upward in the spectrum from the 30-50 MHz band.

Usage of this band varies widely from state-to-state. In the US as a whole, 27% of Fire Radio Service systems use 30-50 MHz frequencies. In the state of Pennsylvania, 80% of the Fire Radio Service systems use 30-50 MHz frequencies, while in Illinois, only 5% use them.

In the other two services of greatest interest to Fire, Rescue and Emergency Medical response operations, 16% of systems in the Local Government Radio Service are using 30-50 MHz frequencies, and 15% of those in the Special Emergency Radio Service are using frequencies in that band. In Nebraska, more than half of the Local Government licensees use 30-50 MHz frequencies, while in California the percentage is 14%. Similar variations hold true for the Special Emergency Radio Service.

All told, in the three services which accommodate the operations of Fire, Rescue and Emergency Medical agencies -- the Fire, Local Government and Special Emergency Radio Services -- almost 20% of the licensees, or about 13,500 out of more than 69,000, are operating in the 30-50 MHz band.

PSCC SERVICE CONSOLIDATION RECOMMENDATION:

Statistics showing Public Safety use of the 470-512 MHz and the 806-821 MHz bands in relation to the use of the bands by the other types of private land mobile radio services show clearly the futility of expecting the Public Safety services to license spectrum in open competition with the other services on a first come, first serve basis.

The reality of Public Safety communications in the United States is that more than 80% of the operations below 800 MHz are being conducted on frequencies below 174 MHz, and almost 99% are being conducted on frequencies below 470 MHz.

General conclusions which can be drawn from these figures are that a large proportion of the Forestry-Conservation licensees are State agencies which operate wide-area systems covering many locations; the Highway Maintenance licensees are largely a mix of State and county agencies; Police licensees are largely municipal, county and

State agencies; and Fire service licensees are municipalities, counties and volunteer departments for the most part.5

The Commission has proposed to consolidate the current 19 radio services. It proposes to either (a) consolidate the current radio services into three broad radio services (Public Safety, Non-Commercial and Specialized Mobile Radio) plus a General Category Pool encompassing all three services; or (b) retain the current services and assign to those services their existing frequency assignments, but assign all new frequencies to the proposed new broad categories and the General Category Pool.

For the Public Safety services, PSCC urges the Commission to adopt a variation of the second of these proposals, keeping the Public Safety frequency assignments available only for Public Safety use, but retaining the advantages of the "pool" concept which it proposes.

The Council believes that any consolidation which permits the joint or shared use of any portion of the spectrum by Public Safety and non-Public Safety users would be a mistake. However, it believes that the concept of the General Category Pool should be adopted within the Public Safety category itself.

PSCC urges the retention of the existing Police, Fire, Highway Maintenance, Forestry/Conservation, and Emergency Medical Radio Services as separate services in the Public Safety category and the assignment to them of their existing frequency assignments as well as newly derived channels which are between existing assignments of a single service.

PSCC recommends that the Commission recognize the present Local Government Radio Service for the Public Safety "pool" that it was created to be, and in fact is, and assign to this pool the

Service than any of the others. The Commission's aims in Docket No. 92-235 are considerably different from its objectives when it designated a single coordinator for each service.

Allowing equal Public Safety coordinator access to this pool would permit the coordinator with the most expertise in and the closest relationship to the discipline of the applicant to provide all the service the agency would need, using the existing "home discipline" service frequencies first and the Local Government pool secondarily.

By opening access to this pool of frequencies to all the Public Safety coordinators and assigning newly derived channels to it in the manner proposed here, the Commission would also be greatly reducing the number of instances of interservice sharing and concurrences necessary. This would both speed the coordination and licensing processes and reduce the overall coordination costs to an applicant who might otherwise have to deal with multiple coordinators.

It would also provide an opportunity to evaluate whether Public Safety licensees would "shop" for the lowest fee or the best and fastest service among the frequency coordinators on a "level playing field".

PSCC recognizes that electronic data transfer capability is a requirement in the coordination of pooled frequencies by several parties, as well as in the automated filing of applications with the Commission, and assures the Commission that its members will be at the forefront in competency in this regard.

Two of PSCC's members already share a Public Safety radio usage data base in an operation which they believe to be superior to any other in the Public Safety category and are exchanging data electronically now. Discussions are in progress to complete a system of electronic information exchange between all of the members of the Council and others who may wish to take part in such exchange.

The PSCC, through its members, requests that the Commission consider and act favorably upon these comments as it proceeds with this important undertaking.

Respectfully submitted,
Public Safety Communications
Council

Bv:

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- A. Numbers of licensees in Public Safety services on frequencies below 512 MHz, by state, as of February, 1993.
- B. Public Safety licensees on frequencies below 512 MHz, showing percentages by service by state, as of February, 1993.
- C. Comparison of total number of Public Safety licensees and the relationship (or lack) between number of counties or large cities in a state or the square mileage of the state.
- D. Number of licensees in the Fire Radio Service, by state and frequency band.
- B. Number of licensees in the Local Government Service, by state and frequency band.
- F, Number of licensess in the Special Emergency Service. by state

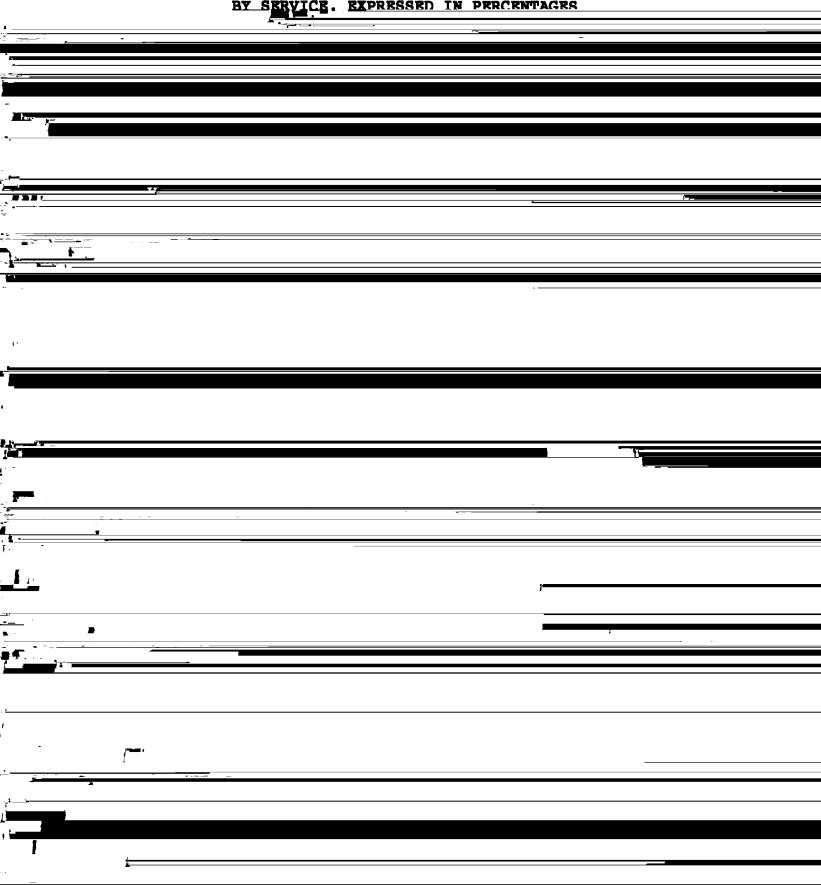


STATE	PP	PL	PF	PS	PO	PH	TOTALS
TX	1000	1169	963	952	13	60	4157
UT	85	198	64	135	2	25	509
VT	71	172	189	94	1	48	575
VA	428	400	274	564	6	22	1694
WA	211	366	303	361	4	140	1385
WV	165	186	239	203	6	12	811
WI	342	800	611	534	16	140	2785
WY	82	114	50	203	6	11	466
PR/VI	11	71	2	52	0	8	144
1	4,464	19,364	19,198	19,215	588	3465	76,294

^{*} This is a count of the number of entities holding valid, unexpired licenses from the FCC on frequencies below 512 MHz in the Police, Local Government, Fire, Special Emergency, Forestry/Conservation and Highway Maintenance Radio Services in each state. An licensed entity is counted once for each frequency band below 512 MHz in which it may hold a license, but only once per band regardless of the number of licenses held.

APPENDIX B

TYPES OF PUBLIC SAFETY RADIO LICENSEES IN EACH STATE BY SERVICE. EXPRESSED IN PRECENTAGES



STATE	PP%	PL%	PF%	PS%	PO%	PH%	NUMBER
UT	17	39	13	27	1	5	509
VT	12	30	33	16	1	8	575
VA	25	24	16	33	1	1	1694
WA	15	26	22	26	1	10	1385
WV	20	23	30	25	1	2	811
WI	12	29	22	19	1	5	2785
WY	18	25	11	44	1	2	466
PR/VI	8	49	1	36	0	6	144

APPENDIX C

STA	POPULATI TE	on Counties	CITIES (>75,000)	SQUARE MILES	# OF P.S. LICENSEES	POPULATION PER LICENSEE
			(,,			
AL	3,894,02	5 67	5	50,767	1242	3,135
AK	401,85		ĭ	570,833	275	1,461
AR	2,286,35		ī	52,078	1022	2,236
λZ	2,716,54		7	113,508	795	3,417
CA	23,667,76		6 9	156,299	3442	6,876
CO	2,889,73		9	103,595	1022	2,827
CT	3,107,56	4 8	7	4,872	1029	3,019
DE	594,33		Ö	1,932	195	3,047
DC	638,43		_	63	37	1,725
FL	9,746,96		15	54,153	1954	4,988
GA	5,462,98	2 159	5	58,056	1665	3,281
HI	964,69		ī	6,645	56	17,226
ID	944,12		1	82,412	563	1.676
IL	11,427,40		10	55,645	4904	2,230
IN	5,490,21		6	35,932	2198	2,497
IA	2,913,80		3	55,965	1784	1,633
KS	2,364,23		4	51,778	1375	1,719
KY	3,660,32		2	39,669	1409	2,597
LA	4,206,11		5	44,521	1090	3,858
ME	1,125,04		0	30,995	964	1,167
MD	4,216,93	3 24	2	9,837	658	6,408
MA	5,737,09	3 14	11	7,824	1867	3,072
MI	9,262,04		14	56,954	2793	3,316
MN	4,075,97	0 87	4	79,548	1968	2,071
MS	2,520,77		1	47,233	985	2,559
MO	4,916,76		4	68,945	1936	2,539
MT	786,69		1	145,388	734	1,071
NE	1,569,82		2	76,644	1143	1,373
NV	800,50		4	109,894	228	3,511
NH	920.61	0 93	2	8.893	717	1 _283

STAT	POPULATI TE	ON COUNTIES	CITIES (>75,000)	SQUARE MILES	# OF P.S. LICENSEES	POPULATION PER LICENSEE
WA	4,132,35	3 39	4	66,511	1385	2,983
WV	1,950,18	6 55	0	24,119	811	1,171
WI	4,705,64	2 72	5	54,426	2785	1,689
WY	469,55	7 23	0	96,989	466	1,007
PR/\	713,293,08		9	3,591	144	22,868

*In five instances in the above listings showing numbers of counties in the state, the number of independent cities in the state is added to the number of counties. This is the case with respect to Maryland, Missouri and Nevada, which each have one independent city, and Virginia, which has 41 independent cities. The listing of 84 for Puerto Rico/Virgin Islands counts cities.

APPENDIX D

Fire Radio Service (As of February 15, 1993)

STATE	25-50	72-76	150-174	421-430	450-570	470-512	TOTALS
AL AK AR AZ CA CO CT DE DC FL GA HI ID IL IN IA KS KY LA ME	25-50 5 15 22 123 11 228 74 0 32 13 0 2 55 12 6 9 17 29 51	72-76 1 1 0 2 7 0 1 0 0 2 0 0 2 3 0 0 0 0 0	189 50 163 159 560 195 79 7 2 330 271 10 95 993 653 413 111 343 227 286	421-430 0 0 0 0 0 0 0 0 0 0 0 0 0	450-570 22 5 32 29 59 17 38 7 0 52 14 1 12 53 18 33 48 35 15 18	470-512 0 0 0 15 0 0 0 0 0 0 0 0 0 0	TOTALS 217 57 210 192 764 223 346 88 2 415 300 11 109 1103 686 452 168 395 271 355
MD	175	1	65	0	8	0	249
MA MI	281 62	2 1	206 602	0 10	52 27	32 0	573 702
mn Ms	4 14	0	477 214	0 0	13 14	0	494 242
MO	2	0	427	0	24	0	453
MT	1	0	110	0	1	0	112
ne Nv	6 0	0	34 20	0 0	28 7	0 0	68 27
NH	60	0	157	ŏ	18	ŏ	235
NJ	260	1	327	0	47	16	651
NM	0	0	156	0	8	ō	164
ny nc	789 67	4 0	272 538	1 0	110 52	5 0	1181 657
ND	1	Ŏ	60	Ö	11	Ŏ	72
OH	554	2	661	5	103	Ŏ	1325
OK	4	Q	242	0	9	0	255
OR	10	4	258	0	26	0	298
PA RI	1310 1	4 0	310 0	0	51 1	1 0	1676 2
SC	35	Ö	159	Ö	31	0	225
SD	0	0	59	ŏ	7	Ŏ	66
TN	26	2	228	0	59	0	315
TX	158	1	753	0	46	5	963
UT	0	0	52	0	12	0	64

STATE	25-50	72-76	150-174	421-430	450-570	470-512	2 TOTALS
VT	22	0	147	0	20	0	189
VA	118	0	112	0	44	0	274
WA	8	4	258	0	33	0	303
WV	113	0	94	0	32	0	239
WI	107	0	484	0	20	0	611
WY	0	0	47	0	3	0	50
PR & V	71 1	0	0	0	1	0	2
Total	4902 26%	47 .2%	12,723 66%	16 .08%	1435 7%	75 .4%	19,198

APPENDIX B

Local Government Radio Service (As of February 15, 1993)

AL	26	3	266	0	85	0	380
AK	1	3	57	Ö	14	Ō	75
AR	72	Ö	171	Ö	65	Ö	308
λZ	10	0	112	Ö	32	Ö	154
CA	127	6	436	Ö	234	38	841
CO	20	ī	200	Ö	73	Ō	294
CT	55	10	130	Ö	44	Ŏ	240
DE	3	ī	22	Ŏ	8	Ö	35
DC	ī	ō	1	Ŏ	2	2	6
FL	64	5	323	Ŏ	136	10	538
GA	82	ō	324	Ŏ	100	ō	506
HI	ī	ĭ		ŏ	5	Ö	14
ID	13	ī	7 89	Ŏ	22	Ŏ	125
IL	145	6	802	Ŏ	186	4	1143
IN	8	i	378	Ö	80	Ō	467
IA	58	Ō	329	Ö	92	Ŏ	479
KS	79	Ŏ	252	Ö	122	Ö	453
KY	50	3	220	Ö	73	Ŏ	346
LA	66	4	162	Ŏ	55	Ŏ	287
MB	20	3	218	Ŏ	35	Ŏ	276
MD	22	ĭ	71	Ö	26	6	126
MA	85	9	221	Ŏ	60	16	391
MI	94	1	493	20	149	- 0	727
MN	34	3	419	0	103	Ö	559
MS	61	ī	147	Ö	33	Ŏ	242
MO	10	Ō	441	Ö	68	Ö	519
MT	23	i	123	Ö	26	Ö	173
NE	274	ī	129	Ö	71	Ö	475
NV	7	Ō	51	Ö	19	Ö	77
NH	23	4	129	Ō	23	Ö	179
NJ	146	2	334	Ö	103	35	620
NM	10	Ō	108	Ö	24	0	142
NY	158	10	393	Ŏ	158	ğ	728
NC	131	2	278	Ō	167	Ō	578
ND	4	ō	102	Ŏ	24	Ŏ	130
OH	137	7	446	10	173	Ö	773
OK	11	Ò	300	0	49	Ö	360
OR	45	6	168	Ŏ	42	Ŏ	257
PA	251	7	553	Ŏ	183	23	1017

STATE	25-50	72-76	150-174	421-430	450-570	470-512	TOTALS
VA	152	2	137	0	103	6	400
WA	26	4	248	0	88	0	366
WV	41	0	87	, 0	58	0	186
WI	108	3	561	0	128	0	800
WY	4	1	87	0	22	0	114
PR & V	'I 5	0	52	0	14	0	71
Total	3315 17%	128 .7%	11,898 61%	36 .2%	3822 20%	165 1 .9%	.9,364

APPENDIX F

Special Emergency Radio Service (As of February 15, 1993)

STATE	25-50	72-76	150-174	421-430	450-570	470-512	TOTALS
AL AK AZ CO CT DC DC FL HI IN IA KY LA MD MI MN MN MN MN MN MN MN NO MN NO MN NO MN NO MN MN MN MN MN MN MN MN MN MN MN MN MN	96 207 147 379 632 214 110 147 147 159 40 549 168 79 168 79	72-76 1 1 0 0 18 1 0 1 2 5 0 1 2 2 0 0 1 0 2 3 1 1 0 0 2 3 1 1 0 0 0 2	181 65 119 111 680 183 118 19 13 267 279 133 1025 416 321 205 249 158 140 79 226 536 443 136 327 209 183 36	000000000000000000000000000000000000000	57 20 157 293 85 27 85 245 89 319 268 46 74 71 57 18 26 61 162 43 25 81 40 48 14	000040000000000000000000000000000000000	248 77 167 285 142 306 214 322 546 390 168 1408 515 318 379 224 166 146 337 781 553 221 458 265 309
NH NJ NM NY NC	14 105 8 228 109	1 0 1 0	94 377 59 612 496	0 0 0 1	8 39 23 155 85	0 0 0 2	118 522 90 999
ND OH OK OR	6 110 19 18	0 9 1 4	203 632 230 167	0 2 0 0	10 212 37 37	0 0 0 0	690 219 965 287 226
PA RI SC SD	160 8 5 15	3 0 1 0	548 26 160 97	0 0 0	196 3 21 9	0 0 0 0	907 37 187 121
TN TX	80 80	3 2	399 611	0 0	75 259	0 0	557 952

STATE	25-50	72-76	150-174	421-430	450-570	470-512	2 TOTALS
UT	11	0	89	0	35	0	135
VT	16	1	65	0	12	0	94
VA	54	2	330	0	178	. 0	564
WA	34	1	270	0	56	0	361
WV	26	0	146	0	31	0	203
WI	105	3	364	0	62	0	534
WY	26	0	146	0	31	0	203
PR & V	I 2	0	34	0	15	1	52
Total	2456	83	12,929	8	3733	7	19,216
	13%	.48	67%	.04%	19%	.04%	

APPENDIX G

Police Radio Service (As of February 15, 1993)

STATE	25-50	72-76	150-174	421-430	450-570	470-512	TOTALS
AL AK	6 1	2 1	281 47	0	35 2	0	324 51
AR	154	Ō	103	ŏ	50	Ö	307
AZ	14	ĭ	82	ŏ	29	ŏ	126
CA	58	4	264	0	148	53	527
CO	0	0	102	0	44	0	146
CT	71	0	33	0	54	1	159
DE	3	0	26	0	1	1	31
DC	1	0	2	0	1	0	4
FL	32	0	247	0	105	5	389
GA	8	0	381	0	49	0	438
HI ID	0 12	0 0	7 24	0 0	5 81	0	12
IL	131	5	415	0	89	77	117 717
IN	2	Ö	303	Ŏ	51	1	357
IA	29	ŏ	169	ŏ	34	Ô	232
KS	186	0 2	95	ŏ	61	Ŏ	344
KY	40	0	164	Ō	36	Ö	240
LA	154	0	108	0	25	0	287
ME	8	0	92	0	9	0	109
MD	36	0	38	0	25	5	104
MA	105	0	151	0	45	125	426
MI	96	0	276	10	80	0	462
MN	15	5	186	0	39	0	245
MS MO	142 3	0	99 200	0	8	0	249
MT	65	0	390 78	0 0	32 14	0 0	425
NE	138	Ö	66	0	33	0	157 237
NV	6	Ŏ	36	Ŏ	6	Ö	48
NH	5	ĭ	99	ŏ	14	Ö	119
NJ	154	1 3	356	Ŏ	74	46	633
NM	6	Ö	93	Ö	9	Ö	108
NY	126	0 2	364	4	64	5	565
NC	12	1	244	0	157	0	414
ND	2	0	83	0	14	0	99
OH	278	2	426	17	143	0	864
OK	26	0	315	0	40	0	381
OR	5	0	120	0	29	0	381
PA	150	3	339	0	97	10	599
RI	3 9	0	38	0	5	2	48
SC SD	82	1 0	62 30	0 0	128 23	0	200
TN	36	1	170	0	23 171	0 0	135 378
TX	102	Ō	784	Ŏ	110	4	1000

STATE	25-50	72-76	150-174	421-430	450-570	470-512	TOTALS
UT	6	0	65	0	14	0	85
VT	3	0	12	0	56	0	71
VA	219	0	102	0	105	2	428
WA	10	1	153	0	47	0	211
WV	87	2	49	0	27	0	165
WI	37	2	260	0	43	0	342
WY	3	0	78	0	1	0	82
PR & V	I O	0	6	0	5	0	11
Total	2877 20%	39 .3%	8513 59%	31 .2%	2567 18%	337 2%	14,464

APPENDIX H

Forestry-Conservation Radio Service (As of February 15, 1993)

STATE	25-50	72-76	150-174	421-430	450-570	470-512	TOTALS
AL AK AR AZ CA CO CT DE DC FL	1 1 1 9 1 1 1 0 6	0 1 0 0 0 0 0	2 3 6 10 37 10 2 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 1 0 0 8 0 1 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4 6 7 11 54 11 4 2 0 20
GA HI ID IL IN IA KS KY LA ME MD MA	3 0 0 11 0 2 1 3 2 1 2	0 0 1 0 0 0 0	3 1 2 89 22 11 6 4 3 2 3	000000000000000000000000000000000000000	0 0 1 4 3 0 1 3 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6 1 3 105 25 13 8 10 5 4 5
MI MN MS MO MT NE NV NH NJ NM	1 0 2 1 1 1 0 2 6 1 6	0 1 0 0 0 0 0	18 16 5 7 1 4 3 1 13 7	1 0 0 0 0 0 0	2 2 1 3 2 2 1 1 2 2	000000000000000000000000000000000000000	22 19 8 11 4 7 4 21 10
NC ND OH OK OR PA RI SC SD TN	3 0 2 1 0 8 1 2 0	0 0 0 0 0 0	5 21 3 8 8 1 3	000000000000000000000000000000000000000	1 1 7 2 1 1 0 1	000000000000000000000000000000000000000	8 6 30 6 9 17 2 6